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**RAW SEQUENCE LISTING
PATENT APPLICATION US/09/005,318**DATE: 02/20/98
TIME: 10:50:14

INPUT SET: S23610.raw

This Raw Listing contains the General
Information Section and up to the first 5 pages.

SEQUENCE LISTING

ENTERED

1 (1) General Information:

2 (i) APPLICANTS: Hein, Mich B.
3 Hiatt, Andrew C.
4 Fitchen, John H.5 (ii) TITLE OF INVENTION: NOVEL EPITHELIAL TISSUE TARGETING AGENT
6
78 (iii) NUMBER OF SEQUENCES: 113
9

10 (iv) CORRESPONDENCE ADDRESS:

11 (A) ADDRESSEE: SEED and BERRY LLP
12 (B) STREET: 6300 Columbia Center, 701 Fifth Avenue
13 (C) CITY: Seattle
14 (D) STATE: Washington
15 (E) COUNTRY: USA
16 (F) ZIP: 98104
17

18 (v) COMPUTER READABLE FORM:

19 (A) MEDIUM TYPE: Floppy disk
20 (B) COMPUTER: IBM PC compatible
21 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
22 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
23

24 (vi) CURRENT APPLICATION DATA:

25 (A) APPLICATION NUMBER:
26 (B) FILING DATE: 09-JAN-1998
27 (C) CLASSIFICATION:
28

29 (viii) ATTORNEY/AGENT INFORMATION:

30 (A) NAME: Maki, David J.
31 (B) REGISTRATION NUMBER: 31,392
32 (C) REFERENCE/DOCKET NUMBER: 310098.401C1
33

34 (ix) TELECOMMUNICATION INFORMATION:

35 (A) TELEPHONE: (206) 622-4900
36 (B) TELEFAX: (206) 682-6031
3738 (2) INFORMATION FOR SEQ ID NO:1:
3940 (i) SEQUENCE CHARACTERISTICS:
41 (A) LENGTH: 137 amino acids
42 (B) TYPE: amino acid
43

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47 (C) STRANDEDNESS:
48 (D) TOPOLOGY: linear

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54 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

55 Gln Glu Asp Glu Arg Ile Val Leu Val Asp Asn Lys Cys Lys Cys Ala
56 1 5 10 15

58 Arg Ile Thr Ser Arg Ile Ile Arg Ser Ser Glu Asp Pro Asn Glu Asp
59 20 25 30

61 Ile Val Glu Arg Asn Ile Arg Ile Ile Val Pro Leu Asn Asn Arg Glu
62 35 40 45

64 Asn Ile Ser Asp Pro Thr Ser Pro Leu Arg Thr Arg Pro Val Tyr His
65 50 55 60

67 Leu Ser Asp Leu Cys Lys Lys Cys Asp Pro Thr Glu Val Glu Leu Asp
68 65 70 75 80

70 Asn Gln Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp Ser
71 85 90 95

73 Ala Thr Glu Thr Cys Tyr Thr Tyr Asp Arg Asn Lys Cys Tyr Thr Ala
74 100 105 110

76 Val Val Pro Leu Val Tyr Gly Gly Glu Thr Lys Met Val Glu Thr Ala
77 115 120 125

79 Leu Thr Pro Asp Ala Cys Tyr Pro Asp
80 130 135

82 (2) INFORMATION FOR SEQ ID NO:2:

84 (i) SEQUENCE CHARACTERISTICS:
85 (A) LENGTH: 135 amino acids
86 (B) TYPE: amino acid
87 (C) STRANDEDNESS:
88 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Gln Asp Glu Asn Glu Arg Ile Val Val Asp Asn Lys Cys Lys Cys Ala
1 5 10 15

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100 Arg Ile Thr Ser Arg Ile Ile Pro Ser Ala Glu Asp Pro Ser Gln Asp
101 20 25 30
102 Ile Val Glu Arg Asn Val Arg Ile Ile Val Pro Leu Asn Ser Arg Glu
103 35 40 45
104
105 Asn Ile Ser Asp Pro Thr Ser Pro Met Arg Thr Lys Pro Val Tyr His
106 50 55 60
107
108 Leu Ser Asp Leu Cys Lys Lys Cys Asp Thr Thr Glu Val Glu Leu Glu
109 65 70 75 80
110
111 Asp Gln Val Val Thr Ala Ser Gln Ser Asn Ile Cys Asp Ser Asp Ala
112 85 90 95
113
114 Glu Thr Cys Tyr Thr Tyr Asp Arg Asn Lys Cys Tyr Thr Asn Arg Val
115 100 105 110
116
117 Lys Leu Ser Tyr Arg Gly Gln Thr Lys Met Val Glu Thr Ala Leu Thr
118 115 120 125
119
120 Pro Asp Ser Cys Tyr Pro Asp
121 130 135
122
123
124
125 (2) INFORMATION FOR SEQ ID NO:3:
126
127 (i) SEQUENCE CHARACTERISTICS:
128 (A) LENGTH: 137 amino acids
129 (B) TYPE: amino acid
130 (C) STRANDEDNESS:
131 (D) TOPOLOGY: linear
132
133
134
135
136
137 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
138 Asp Asp Glu Ala Thr Ile Leu Ala Asp Asn Lys Cys Met Cys Thr Arg
139 1 5 10 15
140
141 Val Thr Ser Arg Ile Ile Pro Ser Thr Glu Asp Pro Asn Glu Asp Ile
142 20 25 30
143
144 Val Glu Arg Asn Ile Arg Ile Val Val Pro Leu Asn Asn Arg Glu Asn
145 35 40 45
146
147 Ile Ser Asp Pro Thr Ser Pro Leu Arg Arg Asn Pro Val Tyr His Leu
148 50 55 60
149
150 Ser Asp Val Cys Lys Lys Cys Asp Pro Val Glu Val Glu Leu Glu Asp
151 65 70 75 80
152

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153 Gln Val Val Thr Ala Thr Gln Ser Asn Ile Cys Asn Glu Asp Asp Gly
154 85 90 95
155
156 Val Pro Glu Thr Cys Tyr Met Tyr Asp Arg Asn Lys Cys Tyr Thr Thr
157 100 105 110
158
159 Met Val Pro Leu Arg Tyr His Gly Glu Thr Lys Met Val Gln Ala Ala
160 115 120 125
161
162 Leu Thr Pro Asp Ser Cys Tyr Pro Asp
163 130 135
164
165
166 (2) INFORMATION FOR SEQ ID NO:4:
167
168 (i) SEQUENCE CHARACTERISTICS:
169 (A) LENGTH: 136 amino acids
170 (B) TYPE: amino acid
171 (C) STRANDEDNESS:
172 (D) TOPOLOGY: linear
173
174
175
176
177
178 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
179 Glu Asp Glu Ser Thr Val Leu Val Asp Asn Lys Cys Gln Cys Val Arg
180 1 5 10 15
181
182 Ile Thr Ser Arg Ile Ile Arg Asp Pro Asp Asn Pro Ser Glu Asp Ile
183 20 25 30
184
185 Val Glu Arg Asn Ile Arg Ile Ile Val Pro Leu Asn Thr Arg Glu Asn
186 35 40 45
187
188 Ile Ser Asp Pro Thr Ser Pro Leu Arg Thr Glu Pro Lys Tyr Asn Leu
189 50 55 60
190
191 Ala Asn Leu Cys Lys Lys Cys Asp Pro Thr Glu Ile Glu Leu Asp Asn
192 65 70 75 80
193
194 Gln Val Phe Thr Ala Ser Gln Ser Asn Ile Cys Pro Asp Asp Tyr
195 85 90 95
196
197 Ser Glu Thr Cys Tyr Thr Tyr Asp Arg Asn Lys Cys Tyr Thr Thr Leu
198 100 105 110
199
200 Val Pro Ile Thr His Arg Gly Val Thr Arg Met Val Lys Ala Thr Leu
201 115 120 125
202
203 Thr Pro Asp Ser Cys Tyr Pro Asp
204 130 135
205

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206
207 (2) INFORMATION FOR SEQ ID NO:5:
208
209 (i) SEQUENCE CHARACTERISTICS:
210 (A) LENGTH: 119 amino acids
211 (B) TYPE: amino acid
212 (C) STRANDEDNESS:
213 (D) TOPOLOGY: linear
214
215
216
217
218 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:
219
220 Glu Gln Glu Tyr Ile Leu Ala Asn Asn Lys Cys Lys Cys Val Lys Ile
221 1 5 10 15
222
223 Ser Ser Arg Phe Val Pro Ser Thr Glu Arg Pro Gly Glu Glu Ile Leu
224 20 25 30
225
226 Glu Arg Asn Ile Gln Ile Thr Ile Pro Thr Ser Ser Arg Met Xaa Ile
227 35 40 45
228
229 Ser Asp Pro Tyr Ser Pro Leu Arg Thr Gln Pro Val Tyr Asn Leu Trp
230 50 55 60
231
232 Asp Ile Cys Gln Lys Cys Asp Pro Val Gln Leu Glu Ile Gly Gly Ile
233 65 70 75 80
234
235 Pro Val Leu Ala Ser Gln Pro Xaa Xaa Ser Xaa Pro Asp Asp Glu Cys
236 85 90 95
237
238 Tyr Thr Thr Glu Val Asn Phe Lys Lys Val Pro Leu Thr Pro Asp
239 100 105 110
240
241 Ser Cys Tyr Glu Tyr Ser Glu
242 115
243
244
245
246 (2) INFORMATION FOR SEQ ID NO:6:
247
248 (i) SEQUENCE CHARACTERISTICS:
249 (A) LENGTH: 128 amino acids
250 (B) TYPE: amino acid
251 (C) STRANDEDNESS:
252 (D) TOPOLOGY: linear
253
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257
258 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

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SEQUENCE VERIFICATION REPORT
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